RETRODISPLACEMENT OF THE PREGNANT UTERUS.*

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In presenting this subject I aim to emphasize certain indications that should lead to an early examination of pregnant women and the speedy abandonment of conservative treatment in dealing with those cases that show no tendency to right themselves.

I use the term retrodisplacement of the pregnant uterus as a common term, to include the varieties of pure retroversion, pure retroflexion, and a combination of the two; i. e., retroversion of a retroflexed uterus. Fully twenty-five per cent. of women in general have retrodisplacement of the uterus. Just what percentage of pregnant women suffer with this condition is impossible to state because the majority of women are not examined in the early months of pregnancy. I hold, contrary to the general opinion, that this condition is no bar to impregnation; whether the pregnancy is carried to full term is another question.

There are two views as to the cause of this condition. Retrodisplacement of the pregnant uterus in early pregnancy may arise de novo, due to the same causes that bring it about at other times; e. g., a fall, heavy lifting, coitus, carelessness in permitting the bladder to become over-filled, etc., or, pregnancy may start in a uterus already retrodisplaced. This latter is the most common cause.

The clinical features of such cases are best described by citing some cases that have occurred in my service at the University of California Hospital, Mount Zion Hospital, and in my private practice.

Case I. Mrs. W., age 27, last menstruated March 7th, 1912. Now gravid for the sixth time; five of her pregnancies terminated in abortions, all of which were induced. The second and third were followed by fever and great pain in the lower abdomen, which was evidently parametritis. She came to my office April 15th complaining of a dragging sensation in the pelvis, constipation that was becoming very obstinate, backache, nausea and vomiting that was making her very miserable. On examination I found a pregnant uterus that was so retrodisplaced and bound down by adhesions that it was impossible to correct the faulty position. I packed the posterior fornix rather lightly, however, and instructed the patient how to keep her bladder and rectum empty. After continuing this for three weeks I found that the uterus was becoming more movable and the use of the tampon was discontinued. At the eleventh week of gestation the patient reported that all her symptoms were gradually disappearing. An examination at the end of the twelfth week revealed the fact that her uterus had righted itself and was ascending into the abdominal cavity.

This is only one of a large number of such cases. The rule is that spontaneous reposition will occur in the absence of any severe complication. This case was complicated by adhesions but the uterus replaced itself nevertheless, either by the adhesions softening and permitting stretching, or by disappearing altogether.

Case II. The patient whose uterus is retrodisplaced and bound down by adhesions is not always so fortunate, however, as case I, and case II had a different termination. Mrs. A., age 25, pregnant for the second time, summons me to her home June 12th, 1913. Her first pregnancy terminated in abortion at the third month, followed by fever and hemorrhage, and she was in bed for three weeks. I find her flowing profusely, and from her story she is three months pregnant. She has been spotting for the last two days, with severe pains in the back and in the lower abdomen, which are becoming of an intermittent character and more frequent. For the past two weeks she has had trouble in emptying her bladder. Examination reveals a tumor mass in the posterior fornix and I was not sure whether I was dealing with a retrodisplaced pregnant uterus or a broad ligament extra-uterine pregnancy. The patient was sent to hospital and after emptying both bladder and rectum a careful examination was made under anesthesia. I found a retrodisplaced pregnant uterus bound down by firm adhesions, the cervix being just at the symphysis and the os open admitting one finger. An abortion was inevitable. The uterus was emptied in the usual manner and a two and a half months fetus removed. Convalescence was complicated by a marked cystitis and pyelitis which cleared up in a measure after draining and irrigating the pelvis of the kidney. On the seventeenth day postpartum the patient left the hospital. There was pus microscopically in the urine, constipation was marked, and the uterus was immovable with the fundus in the Douglas. The patient refused to submit to an operation to correct the retrodisplacement.

The points of interest in this case are: 1st, an antecedent history of pelvic trouble; 2d, abortion; 3rd, amenorrhea for three months, and 4th, bladder disturbance and other symptoms showing beginning incarceration. Williams in his textbook on obstetrics, page 574, says, "Abortion is common in pregnancies complicated by retrodisplacements. It usually occurs in the course of the third month, when the growing uterus pretty well fills the pelvic cavity and, becoming irritated by the pressure to which it is subjected, begins to contract and thus brings about the expulsion of the ovum." Changes in the endometrium, due to the retrodis-

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placement, are just as apt to bring an abortion as irritation of the uterus due to pressure.

These causal factors in the production of abortion can surely be cured and a corrective operation for the retrodisplacement should be performed. The operation best adapted to the particular case in hand should be selected, the non-pregnant state being the time most suitable. Even if the diagnosis of retrodisplacement is not made until the early months of pregnancy, the operation may still be performed without hesitation. Formerly it was believed that the pregnant woman should never be operated upon, the extraction of a tooth even being considered as a procedure that would cause abortion or premature labor. We now know, as a result of the employment of anesthesia and improved surgical technic, that many operations may be performed at this time with but little additional risk. As instances supporting this statement I cite cases III and IV.

Case III. Mrs. B, age 23, para I, referred to me by Dr. Bine, with a previous history free from pelvic trouble, was married in June, 1912; she menstruated last on Oct. 8th, 1912. I saw her for the first time in my office Nov. 22d, 1912, when she complained of pain in the lower abdomen and back. Examination revealed a retrodisplaced uterus with the fundus in the Douglas. The uterus was movable, but on attempting to replace it the promontory of the sacrum acted as an obstacle. However, it was easily replaced with a tenaculum on the anterior lip of the crevix and pressure on the corpus in the direction of the right sacro-iliac synchondrosia. The patient was then fitted with a Smith-Hodge pessary and directed to return in two days. She came as directed but instead of feeling relieved as when she left the office, she was feeling badly. I examined her and found the fundus again in the Douglas. Employing the same procedure the uterus was replaced and a larger sized pessary used, but with no effect for at the end of the week the patient was back again complaining bitterly. The pessary was removed and by means of the Sims position and the use of a light vaginal tampon I tided her over the next two weeks; whenever she assumed the upright position or strained at stool the uterus became displaced. About the eleventh week the patient sent for me; I found her in much pain and examination revealed a greatly distended bladder. I catheterized her, sent her to the hospital, and the next morning an Alexander operation was performed. The round ligaments were easily found; they were thickened, easily pulled out, and of a bluish-smoky hue. The wound healed by first intention and the post-operative state was uneventful. A Smith-Hodge pessary was fitted but removed in a month as the uterus was well up in the abdominal cavity. The patient went to term, delivering herself spontaneously. An examination made six weeks postpartum found the uterus up in the normal anteverted position.

Case IV. Mrs. L, para III, was sent in to my service at the University of California Hospital complaining of inability to urinate. According to her history she was three and a half months pregnant. For the past month she had been troubled with frequent micturition. This gradually subsided but she noticed that urination was becoming difficult, and during the previous week she had to stand erect, spread her legs, and press over the lower abdomen whenever she desired to empty the bladder; since the day before she had been dribbling. Examination showed a cystic tumor in the median line of the abdomen which seemed to arise from the pelvis with its upper margin two or three fingers below the umbilicus. This tumor has been mistaken time and time again for the pregnant uterus. By passing a catheter I removed 600 cc. of urine but did not empty the distended organ for fear of producing hemorrhage. In two hours I drew off 700 cc. more. Later under ether anesthesia a bimanual examination was made and a three and a half month incarcerated uterus was discovered. The entire Douglas was filled by the retrodisplaced uterus, the cervix being above the symphysis. It has been my experience that in cases where the Douglas is entirely filled by the uterus in such a manner as to obliterate the space, it is only a waste of time to endeavor to replace it by manual maneuvers. The uterus is held in this position by an intra-abdominal pressure so great that only operative procedure can overcome it. A laparotomy was decided upon and a median incision was made below the umbilicus, care being taken not to injure the distended bladder. The hand was introduced and with great difficulty the uterus was lifted out of the pelvis and to one side of the promontory. As it was liberated a loud sucking noise was produced by the inrush of air to fill the Douglas. A Smith-Hodge pessary was introduced to keep the uterus in its new position and the bladder was kept emptied by catheter every eight hours. Urotropin, ten grains thrice daily, was administered, and the patient kept quiet the first three days by the use of rectal suppositories each containing extracti opii, one-half grain, and extracti belladonnae, one eighth grain. She made an uneventful recovery from the laparotomy and left the hospital in fifteen days. The pessary was removed at the end of a month. This patient went to term and was delivered of an eight pound boy.

Formerly these cases were treated by inducing abortion, or by puncturing the retrodisplaced uterus through the Douglas. This procedure has been condemned because of the danger. In cases where the conditions are such that abortion is inevitable, or those where the uterus must be emptied, but which cannot be done in the ordinary way, the procedure of choice would be to empty the uterine cavity by a posterior vaginal hysterotomy.

Case V. This illustrates another clinical feature that is apt to occur in a retrodisplaced pregnant uterus if it does not terminate in abortion. Pregnancy may continue uninterrupted for a long while. This is possible by the marked upward growth of the anterior wall of the uterus, while the posterior wall retains its original position in the Douglas. By some this is termed partial incarceration, which to me is a nisnomer, and is better designated as "sacculation."

Mrs. R. age 26, para II, was sent to me because the bag of waters had ruptured and she was supposed to be in labor. The patient was hurried to the University of California Hospital where the following history was elicited: This is her second pregnancy; the first was a full term uneventful pregnancy, but labor was complicated by a profuse hemorrhage which occurred immediately after delivery. The attending physician packed the uterus without removing the placenta. On the eighth day the packing and the placenta were removed. She was in bed for fourteen days and was free from fever so far as she knows. The present pregnancy is at the twenty-sixth week of gestation. She had had urinary difficulty for the past four months with retention of urine for the last three, relieved

by catheterization twice daily by her attending physician. Constipation is very pronounced, the bowels moving only with the greatest difficulty; even walking more than a block is out of the question.

The bag of water ruptured at seven o'clock in the evening of Feb. 18th, 1912; my examination was made on the evening of the 19th. The abdomen was ovoid and the distended bladder could be plainly made out. This was emptied by the use of a soft rubber catheter which had to be introduced nearly its entire length before the bladder contents, 600 cc., could be drawn off. After the bladder and rectum were emptied vaginal examination revealed a marked bulging of the posterior fornix, which was so pronounced that the mass could be plainly seen by separating the vulva. The cervix could not at first be located, but finally by inserting the fingers with palmar surfaces behind the symphysis I made out the cervix four or five centimeters above. Reposition was out of the question and the case was seen in consultation with Drs. A. J. Lartigau and R. K. Smith. Laparotomy was decided upon and the patient prepared for a Cesarean section. A median incision was made below the umbilicus, the hand inserted and the uterus freed from the pelvic cavity with great difficulty; this was followed by an inrush of air. The overhanging promontory was found to be the obstacle. The uterus was eventrated and the abdominal cavity walled off by hot pads. Opening the uterus a six and a half months' fetus was removed, which breathed, but died the same day; the placenta was on the posterior wall. The secundines were removed and the uterus sutured after Sanger's technic. Convalescence was complicated by a colitis and a cystitis which persisted for four weeks with considerable mucus and mucous casts in the stools. The patient left the hospital on the twenty-eighth day after operation.

To recapitulate: Spontaneous reposition is the rule; if this does not occur the patient will either abort or symptoms of incarceration will develop before the end of the fourth month. In extremely rare cases the pregnancy may go to term; this can happen only if the uterus becomes sacculated.

Pregnant women who give a history of antecedent uterine trouble or who complain in the early months of urinary disturbances should be given a thorough vaginal examination. If retrodisplacement of the gravid uterus is diagnosed the procedure that I advocate is bimanual reposition of the uterus aided by traction upon the cervix and pressure on the corpus. If replacement cannot be accomplished thus it should again be attempted under ether anesthesia. After replacement a properly fitting Smith-Hodge pessary is introduced which is removed after the fourth month. If replacement is impossible one of the corrective operations for the condition should be performed, which is best done about the eleventh or twelfth week.

If symptoms of incarceration manifest themselves the rectum and the bladder should be emptied and an attempt made under ether anesthesia to replace the uterus; if this is unsuccessful a laparotomy should be performed with the object of righting the uterus to permit the pregnancy to go to term. If symptoms of infection are present however, or the case is one of inevitable abortion, the uterus should be emptied in the usual manner, and if this is found impracticable resort must be had to posterior vaginal hysterotomy.

CASE OF PELLAGRA.*

Reported by Dr. WM. WATT KERR.

Nellie H., age 44, domestic servant. Came to hospital Oct. 13, 1914, complaining of an eruption on hands and face. Until Oct. 3rd she had been perfectly well, but that morning she noticed swelling and redness of both hands and feet; there was also a feeling of numbness in the extremities. With the exception of a feeling of burning in the affected parts she felt perfectly well.

She said that on Oct. 4th blisters appeared on the hands, and that the redness increased in intensity, while on Oct. 5th the swelling had left the feet, but the eyes had begun to swell.

She had not been taking any medicine nor eating maize or corn, but had been eating rice twice a day for about a week previous to the outbreak, but attributed the skin condition to the fact that she had been using water for washing that contained a considerable quantity of lye.

When she came to the hospital ten days after the commencement of the sickness she said that for a long time she had been constipated for two or three days, and then would have an attack of diarrhea for about a week; that this took place without any relation to time of eating or quality of food, and was not accompanied by any colic pains. There was some dyspnea and palpitation on exertion, but she has not had any precordial pain, edema of the extremities, cough, night sweats or loss of weight. The temperature on admission was 99° F. in the morning, with an evening exacerbation to 101° F., and this type has been maintained ever since.

The family and hereditary history was negative. She came to this country at the age of nineteen, and has lived in Oakland and San Francisco since that time. She had the ordinary diseases of childhood, but nothing in adult life with the exception of a malarial attack eleven years ago that lasted for three months. She has had a fair appetite, used one glass of wine daily with her meals, and only took one cup of tea per day.

Physical Examination.—The patient seems to be confused mentally; asked such questions as "what church she was in," "the number of her room," etc. She had difficulty in putting on her dress, would put on the waist upside down, insisted on getting out of bed. This condition has increased, so that she has become much more irrational and restless, tears the bandages from her hands, under the impression that she is being restrained. At times she realizes her condition, cries, says she is "buggy."

Skin.—Face, except forehead, ears and neck, is of dark red color; is dry, tense and shiny, and beneath the eyes is exfoliating. Borders are fairly sharp, and are not indurated. On hands, the lesions are limited to the backs of the hands, border is sharply defined, and the coloration extends along the backs of the fingers to the first inter-phalangeal joints; it is limited at the wrist. Across the back of the left hand is an exfoliated area, seven cm. long and three cm. wide, showing bright red, tense, shiny skin beneath. Four fingers of the left hand show bullae filled with yellowish serum-like fluid. The back of the right hand and fingers show similar lesions.

The eyes are normal, with the exception of a slight amount of conjunctivitis. Ears are normal, teeth bad, tongue is red along the left edge, with some desquamation. In the neck there are a few palpable glands in the anterior chain, but the thyroid is normal.

Thorax.—At the upper portion of the thorax

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